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REMARKS

Claims 22-32 were withdrawn from consideration pursuant to a provisional election of claims 1-21 and 33-35 made on 12 August 2005. The Applicant hereby confirms the election of claims 1-21 and 33-35. Claims 22-32 are accordingly cancelled by this Amendment.

Claims 1-21 and 33-36 are pending.

The Office action mailed 23 August 2005 indicates that claim 2 would be allowable if rewritten in independent form including all of the limitations of the base claim. Claim 2 has been amended to be independent and to include all of the features cited in claim 1 as originally filed. Accordingly, it is respectfully submitted that claim 2 is now in condition for allowance.

The Office action mailed 23 August 2005 objects to claim 4 for lack of clarity. Claim 4 has been amended to replace "relative to the exposure head" with "relative to the other exposure head", as suggested by the Examiner. Also, claim 5 has been amended to replace "leadscrew nuts" with "the leadscrew nuts" in order to avoid a potential lack of clarity.

The Office action mailed 23 August 2005 rejects claims 1, 3, 15-16, 20-21 and 33-35 under 35 U.S.C. § 102, and rejects claims 3-7, 9-14 and 17-19 under 35 U.S.C. § 103. United States patents No. 4,131,898 to Gamblin, No. 6,290,326 to Hipp et al., No 5,359,434 to Nakao et al., No. 5,587,730 to Karz, and/or United States patent application No. 2003/0048467 to Okamoto et al. have been cited against claims 1, 3-21 and 33-35.

The Examiner is respectfully requested to withdraw the anticipation and obviousness rejections of amended claims 1, 3-21 and 33-35, in light of the following comments. This is because the prior art of record fails to disclose or suggest various features of amended claims 1, 3-21 and 33-35, including at least those features discussed below.

Gamblin discloses an interlacing recorder comprising two printheads. The two printheads are "cooperatively driven", and are "spaced apart by a distance equal to an integer number of advance distances" (see column 4, lines 7-16).

Hipp et al. discloses a system for utilization of printheads wherein a plurality of printheads are mounted on a lead screw by conventional traveling nuts such that rotation of the lead

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screw results in substantially linear movement of the printheads (see column 5, lines 4-24). Each printhead comprises a plurality of nozzles, and a firing controller is provided to control which of the nozzles are fired to print data (see column 5, lines 45-54).

Okamoto et al. discloses an image recorder having more than one recording head. The recording heads are moved concurrently during recording (see paragraph [0045]). The spacing between the recording heads may be adjusted before recording an image by selecting starting positions for the recording heads based on image data (see paragraphs [0046] and [0077]).

Nakao et al. discloses a scanning optical apparatus comprising a semiconductor laser for scanning a surface of a photoconductor. The photoconductor comprises a photosensitive section and a mark section.

Karz discloses a thermal inkjet printer having a primary printhead and a secondary printhead. The secondary printhead may be used to compensate for a failure of the primary printhead.

In compliance with the Applicant's duty of disclosure under 37 C.F.R. §1.56 an Information Disclosure Statement is being filed herewith, listing U.S. patents No. 5,717,451 to Katano et al. and No. 5,663,802 to Beckett et al.

Katano et al. discloses a multihead type imaging apparatus having a plurality of recording heads. Each recording head is disposed on a carriage which may be moved independently. The positions of the recording heads are adjusted "prior to initiation of a recording operation" (see column 6, lines 1-8).

Beckett et al. discloses an engraving apparatus having a plurality of engraving devices for engraving a cylinder. The engraving apparatus may comprise a horizontal positioner for adjusting a distance between engraving devices. The positions of the engraving devices relative to the cylinder (and thus relative to each other) must be adjusted before engraving begins (see column 8, lines 45-47).

Claim 1 has been amended to recite that the adjustable mechanism is operable to change the spacing between the exposure heads "during imaging." Also, new claim 36 has been added,

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which recites that the spacing between the exposure heads is changed "during a retrace cycle." These features are disclosed in paragraph [0021] of the description.

None of the prior art of record discloses or suggests an imaging apparatus having at least two exposure heads wherein the spacing between the exposure heads is changed during imaging, as recited in amended claim 1, or during a retrace cycle, as recited in new claim 36.

Furthermore, with respect to claim 6, the prior art of record fails to disclose or suggest "an auxiliary motor for rotating the at least one of the leadscrew nuts in response to signals provided by a controller". The Office action suggests that this feature is provided by the firing controller of Hipp et al. This is incorrect. As noted above, the firing controller of Hipp et al. is used to control the operation of the nozzles of the printheads, not the traveling nuts. Hipp's printheads are not moveable independently of one another.

With respect to claim 15, the prior art of record fails to disclose or suggest "a speed controller connected to allow a traverse speed of at least one of the exposure heads to be controlled sufficiently precisely to adjust a position of a last channel to within less than one beam width." The Office action suggests that this feature is disclosed by Okamoto et al. This is incorrect. Okamoto et al. fails to disclose such a speed controller. The recording heads of Okamoto et al. move at a "predetermined secondary scanning rate" (see paragraph [0045]).

Accordingly, it is submitted that for at least the foregoing reasons, amended claim 1 and claims 3-15 and 36 which depend therefrom are patentable over the prior art of record.

Claim 16 recites a method which includes the step of "adjusting the spacing between the exposure heads *in accordance with the number of sheets and the size of the media loaded on the media carrier*" (emphasis added). The Office action suggests that this step is disclosed by Gamblin, Hipp et al. and Okamoto et al. This is incorrect. The adjustment of the distance between the printheads of Gamblin is based on the distance the printheads are transported during one rotation of the drum (see column 3, lines 40-43 of Gamblin). Hipp et al. fails to disclose any basis upon which the distance between the printheads is adjusted. The adjustment of the distance between the recording heads of Okamoto et al. is based on a division location (see paragraph [0077] of Okamoto et al.) The other prior art of record also fails to disclose or suggest a method which includes the step of "adjusting the spacing

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between the exposure heads in accordance with the number of sheets and the size of the media loaded on the media carrier", as recited in claim 16.

Accordingly, it is submitted that for at least the foregoing reasons, claim 16 and claims 17-21 which depend therefrom are patentable over the prior art of record.


Claim 33 has been amended to recite that the target comprises three lines which are "arranged in a shape of a "Y". This feature is disclosed in Figure 5-C and paragraphs [0029] to [0031] of the description. None of the prior art of record discloses or suggests such a target.

Accordingly, it is submitted that for at least the foregoing reason, claim 33 and claims 34-35 which depend therefrom are patentable over the prior art of record.

Reconsideration and allowance of this application is respectfully requested in light of the comments set out above.

Respectfully submitted,
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